

# The Colombian Air Force in Red Flag 2012

**Colonel Kris Skinner, USAF-Retired**



## The First Night

The flight of four Kfirs C-10s, callsign Rocket 41, departs its push point in the blackness of night at medium altitude and near supersonic speed. They have just rendezvoused with their tanker, from which each pilot topped off his aircraft's external fuel tanks. There is no moon tonight, only the light of the stars illuminates the scene in their night vision goggles as they maintain their visual formation. They are all very experienced in night attack, but this night something is different. There is extra stress because it is their first mission in this new environment and there are new threats. Their target area is defended not only by surface-to-air missiles (SAMs) and anti-aircraft artillery (AAA), but also by Red Air 'Aggressors' equipped with long-range radar guided missiles, a most difficult scenario. Their goal is to release their load of 500-lb bombs on their assigned target and successfully egress without engaging Red Air; to

strike with precision and lethality while remaining invisible to their adversaries. To add to the stress, as they approach their target, the comm jamming begins. Over the radio, completely unexpected Brittney Spears bellows: “Hit me baby one more time...”. The leader of Rocket 41 flight, Major Sergio “Yahdai” Perdomo persists through the chaos on the radio and identifies the target. With a rush of adrenaline, he pitches his aircraft into a shallow dive and releases his ordnance on target using his computed CCIP delivery system. The other flight members, maintaining their visual formation, maneuver to attack behind their leader, each superimposing their CCIP symbology over the target and precisely release their ordnance. The target is destroyed. However, without warning, during the attack Rocket 43’s radar warning receiver lights up like a ‘Christmas tree’, indicating he is being targeted by a SAM. Seconds later, as if it came from God himself, a loud voice over the radio announces: “Rocket 43 you’re dead.”

Having released their ordnance, Rocket 41 flight, minus #3, regroups for egress. Yahdai quickly selects the egress heading and altitude. Flight members re-establish their formation and radar and visual search responsibilities just as the comm jammer gives up on Brittney Spears and switches to the Beach Boys. These are vulnerable moments for the pilots as they regain their situational awareness, the most critical requirement for the success of a fighter pilot. Past experience and dedicated training have served them well. They re-establish radar search responsibilities off target in time to detect a potential Aggressor inside 10nm at their 1 o’clock. He is definitely a factor for their route of egress. Wasting no time, Yahdai locks the ‘bogey’ and queries AWACS for identification. The AWACS controller swiftly confirms it is indeed an Aggressor. Due to the luck that usually flows from skill, Yahdai has found the Aggressor first. As the Red Air pilot turns to engage, Yahdi fires his missile.

In the debriefing for the first night Red Flag mission flown by pilots of the Colombian Air Force (FAC), Major Perdomo and his flight members watch the reconstruction of their mission. Sophisticated tracking and evaluation systems confirm that his flight did indeed hit their target and ‘kill’ one Aggressor during their egress, with the loss of one member of their formation to the SAM. It was the kind of success all fighter pilots dream of and it represented an auspicious beginning for the pilots of the FAC Combat Air Command #1 (CACOM-1) in their first ever participation in the premier tactical airpower exercise, the USAF-sponsored “Red Flag” at Nellis AFB, Nevada. Kfir is Hebrew for ‘young lion’ and Yahdai and his Rocket 41 flight members had been true to this image during this their first Red Flag night attack mission. The deployment of eight

Kfir fighters and two tanker aircraft to Red Flag 12-4 from 14-28 July 2012 marked the first time a squadron from Latin America had self-deployed to the United States to participate in Red Flag.

## **History of the FAC**

The FAC was organized after WWI. The Colombian Air Force Academy was founded in 1920 and has been training FAC officers ever since. During the decades after WWI the FAC gained the confidence of government leaders, increasing its personnel, aircraft, and installations.

The era of jet aircraft began for the FAC in the 1950s with the incorporation of the F-86 'Sabre'. The FAC entered the supersonic age when in the 1970s it acquired the Mirage-V from France. In the 1990s the Mirage fleet was supplemented by the acquisition of several Kfirs from Israel.

In the mid-1950s armed guerilla organizations in Colombia began to threaten the government's power and legitimacy. The FAC adapted to the situation; training and equipping itself for this internal war. As a result, FAC aircrews have gained vast experience in counter-insurgency operations, intelligence fusing, night flying, and precision attack. Of necessity the FAC has acquired the appropriate weapons systems for these missions: the OV-10 'Bronco', A-37 'Dragonfly', T-27 'Tucano', A-29 'Super Tucano', and AC-47 'Fantasma' gunship.

During this prolonged internal war the FAC's contribution has been important; carrying out missions of rotary and fixed wing airlift, CSAR, intelligence, and close air support. However, in the previous six years the FAC's contribution to the defeat of the insurgents has been decisive, achieving that perfect blending of intelligence, timing, and operational experience which all air forces seek in their operations. The result is the elimination of numerous guerilla leaders via bombing attacks. These attacks have significantly weakened the insurgent movement and have allowed Colombian Army, Navy, and National Police forces to reassert control of almost the entire national territory.

The FAC is the smallest of the Colombian military services; approximately 13,500 total personnel: 3,000 officers and cadets, 3,300 NCOs, and 4,700 recruits, and 2,400 civilians. This compares to the following totals for the other services under the Colombian Ministry of Defense: 235,000 in the Army, 35,000 in Navy (including the Marines), and 144,000 in the National Police. The FAC's relatively small size when compared to the other services is

certainly not indicative of scope and reach. It has developed an impressive operational, maintenance, and logistics infrastructure. The FAC has grown to include six major regional Combat Air Commands (CACOMs), three smaller regional Air Groups, an independent strategic airlift base, a strategic maintenance base, an officer academy, and an NCO academy. With both fixed and rotary wing aircraft, FAC support for the Army, Navy, and National Police is an assumption in Colombia.

## **Combat Air Command #1 (CACOM-1)**

Air Combat Command #1 is the FAC's principal CACOM. It is located in the center of Colombia in a village called Palanquero on the banks of Colombia's principal river, the Magdalena. The unit was established in 1933 and was the first CACOM to receive jet aircraft: F-86, Mirages, and Kfirs. CACOM-1 is the FAC's "Home of the Fighter Pilot". Only the 'cream' of the FAC's pilots, the most experienced in other fighter aircraft, are assigned to CACOM-1. It boasts two fighter squadrons, a transport squadron, and a training squadron. To be assigned to CACOM-1 to fly Kfirs or Mirages a FAC pilot must have flown several years in another tactical fighter. CACOM-1 pilots have routinely flown A-37s, OV-10s, and A-29s before achieving assignment to the unit.

In 2007 the Minister of Defense approved the acquisition of 24 upgraded Kfir C-10/12 aircraft from Israeli Aircraft Industries (IAI) to be based in Palanquero. In the deal, the FAC turned over all its active Mirage-V and Kfir aircraft to IAI. In return, IAI delivered 24 Kfir aircraft upgraded to the C-10 or C-12 configuration; the C-10 complete with airborne radar and modern IR and radar guided air-air missiles. It would be a major step forward for the FAC and a significant training and logistics challenge for CACOM-1. In 2009 CACOM-1 began to take delivery of the first Kfirs. By early 2011 the delivery was complete.

## **Genesis of the Red Flag Idea**

To participate in Red Flag has been the FAC pilots' dream for two generations. Nevertheless, the idea that the FAC could truly do so was first proposed in early 2009 in discussions between FAC Commander, Gen Jorge Ballesteros and leaders of the USAF Mission in the US Military Group in Colombia (AFMIS), USAF Colonel Kris Skinner and Lt Col Chuck Gerstenecker. The idea was to achieve the full potential of the new Kfir aircraft by having CACOM-1 pilots prepare for and participate in Red Flag. With the new Kfirs,

equipped with onboard radar and radar guided missiles, the FAC was moving into the world of fourth generation fighters. Preparing for, deploying to, and successfully participating in a Red Flag exercise with other fourth generation fighter aircraft from allied nations would bring lasting and transformational benefits to the FAC; boosting its operational capability and increasing its interoperability with allies.

Although the dream of Red Flag was extremely tempting in early 2009, the proposal required serious consideration of several challenges. There were at least three. 1) A massive operational training program would be necessary to prepare CACOM-1 aircrews to participate alongside air forces that have fielded fourth generation fighters for years. 2) Given the stringent English requirements imposed by Red Flag, they would have to mount an intensive English training campaign for all participating pilots to achieve the mandatory score of “85” on the USAF English proficiency test. 3) Considering the demands of the ongoing war effort, securing the necessary budget to train for Red Flag, then to deploy over 100 FAC personnel (aircrews and technicians), eight Kfir aircraft, and two tankers from Colombia to Nellis AFB in the United States would require a miracle.

Although budgets were tight and English requirements were strict, the operational preparation seemed to be the most formidable challenge. Red Flag is intentionally designed to confront participating pilots with an intense air and surface threat. Two USAF fighter squadrons at Nellis AFB flying F-15s and F-16s are trained as “Aggressors” and simulate a fourth generation fighter threat. In addition, Red Flag boasts dozens of SAM and AAA threat simulators, who, working jointly with the Aggressors, are very formidable in defending their “Red” airspace against the visiting Blue Force. Could the CACOM-1 pilots successfully operate in this environment?

The evolution of fighter aircraft has proceeded in several generations according to the sophistication of onboard weapons systems and the threat posed by adversaries. Each generation required the fighter pilot to become proficient with new weapons systems, manage additional sensors, and increase his level of situational awareness.

First generation fighters were equipped with onboard cannon and manual bombs, but no onboard radar. This was the state of fighter aircraft after WWII and into the 1950s.

The second generation brought tail-aspect only IR-guided missiles during the 1950s-60s. The pilot could now engage his enemy beyond cannon range, but only from the rear quadrant.

In the 1970-80s the third generation saw the incorporation of an onboard search and tracking radar, all-aspect IR-guided missiles, command-guided radar missiles, guided air-surface missiles and radar warning receivers to detect and warn the pilot of enemy radar systems. These new systems greatly increased the pilot's workload but also offered him increased situational awareness and made him much more effective.

In the 1990s fourth generation fighter aircraft appeared with the addition of active radar guided missiles, satellite-guided weapons, data link, and fusion of sensor provided information.

In early 2009, as it began receiving its new Kfirs (true fourth generation aircraft) and despite a great amount of combat experience, CACOM-1 pilots operated firmly in the second generation. Could these pilots make the leap from their second generation experience to a fourth generation Red Flag in the short time available? Could CACOM-1 pilots dedicate themselves to Red Flag flying training, learning English, and still meet the demands of current operations? Could the COFAC secure the necessary budget to make all of this happen? There were doubts.

The FAC Staff carefully considered these questions. All the FAC generals were motivated to meet the challenges. The decision was made to proceed. Through liaison with AFMIS, COFAC officially solicited the USAF for an opportunity to participate in Red Flag. The USAF approved FAC participation for Red Flag 12-4 in July 2012; contingent on passing an operational evaluation. The date was set. The commitment was made. The race was on!

Red Flag 12-4 would be attended by a variety of aircraft performing different missions. In addition to the FAC Kfirs and tankers, the USAF would send F-15Cs in the air-air role, F-16CJs in the suppression of enemy air defenses (SEAD) role, F-15Es, B-1Bs and B-52Hs in the strike role, KC-135s for air refueling, and E-3C airborne warning and control system (AWACS) for command and control in the air. The US Navy would provide EA-6B electronic suppression aircraft. The United Arab Emirates would send F-16Cs, also in the strike role. A total of 62 aircraft would form the Blue Force. Defending the 12,000 square mile Red Flag training range would be the mission of a total of 16 USAF F-15Cs and F-16Cs acting as Red Air Aggressors and painted in camouflage colors.

COFAC mounted an impressive lobbying campaign with the Minister of Defense to obtain funding for Red Flag. An opportunity to boost FAC aircrew prestige and confidence, to demonstrate the operational capability of the FAC to the world, and improve interoperability with key allies were the selling points. The Minister gave the go ahead and promised the required budget. Near the end of 2009 Major General Tito Pinilla, FAC Chief of Operations, directed the development of a Red Flag training program.



Brigadier General Carlos Bueno

In November 2010 Brigadier General Carlos Bueno was selected as Commander of CACOM-1. General Bueno, one of the FAC's most experienced pilots, was the right man to lead CACOM-1 to Red Flag. He evaluated his pilots for English and flying experience. He made the difficult decision of selecting a Red Flag team and directed that these pilots dedicate themselves exclusively to Red Flag training and improving their English.

In September 2011, General Pinilla was confirmed as the FAC's new Commander, with General Flavio Ulloa as Deputy Commander. Both were fighter pilots and former CACOM-1 Commanders who lent their full support to the decision to participate in Red Flag 12-4.

The USAF also spun into action to help. According to USAF rules, allied units wishing to participate in Red Flag must be operationally certified by the USAF. This responsibility fell upon 12<sup>th</sup> Air Force (12AF) at Davis-Monthan AFB in Tucson, Arizona. It would be the responsibility of the AFMIS in Bogota to help prepare CACOM-1 for the certification. Its new Chief, USAF Colonel Hans Palaoro, who had considerable Red Flag experience, coordinated USAF support with CACOM-1 and 12AF. He built the USAF support plan which included the



following elements: English training, preparation in USAF standard tanker procedures for tanker crews, training for the Kfir pilots in Red Flag 'rules of engagement' and operations with air intercept controllers (GCI), and training in Red Flag specific flight line procedures for maintenance technicians. Colonel Palaoro coordinated a dozen visits by USAF mobile training teams to Palanquero and assisted in the planning of three CACOM-1 air employment exercises in preparation for the operational certification.

Red Flag fever infected the FAC, the Ministry of Defense, and even the office of the President. The first week of November 2011, the week before the annual "Air Force Day" celebration, after more than two years of preparation, CACOM-1 completed the certification required to participate in Red Flag. Not only did they pass the test, but they did it in an impressive manner.

On 8 November Colombian President Juan Manuel Santos spoke to the "Air Force Day" celebration and said:

*"Yesterday a very rigorous examination was given to our Air Force. It turns out that in Las Vegas an exercise is held, a competition of the best air forces in the entire world. Combat squadrons from these air forces are invited to participate in this competition. However, not everyone can go. They have to complete some minimum requirements to be accepted in the competition. It's called Red Flag. For the first time in the history of the Colombian Air Force, the Air Force was invited to participate in this competition. But, first they had to pass the examination. The officers giving the exam to the Air Force were here. And the result of this test, which doesn't surprise me, the qualification they gave to the Colombian Air Force in all aspects was outstanding."*



## Preparation for Red Flag

In Palanquero a new patch was designed to be worn by all CACOM-1 personnel, whether or not they were part of the Red Flag team. The patch, demonstrating the teamwork required to be successful in Red Flag, displays a tanker with four Kfirs in formation surrounded by the inscription: "Somos la Fuerza (We Are the Force), Red Flag 2012."



The patch served its motivational purpose well. However, CACOM-1 would need much more than a new patch to inspire its personnel to shoulder the arduous effort ahead.

The challenges for General Bueno, new CACOM-1 Commander, were formidable:

1. Prepare 18 Kfir pilots, 6 tanker pilots, and over 70 maintenance and logistics specialists to deploy 8 Kfirs and two tankers on a seven hour flight to the EE.UU.
2. Set up shop in their new home and operate under unfamiliar rules and procedures.
3. Launch a 4-ship formation of Kfirs and one tanker twice each day (once by day and once by night) in 19 force employment missions with fourth generation fighters in a daunting tactical environment with the highest threat they had ever seen, under very strict flying rules and bring them back again safely.
4. Extract the maximum amount of learning possible for pilots and technicians.
5. Accomplish all the above in a foreign language, English.

A training strategy was developed which concentrated on three major areas: English, training the Kfir pilots, and training the tanker crews.

USAF rules are strict that all participating air crews must achieve a score of “85” on the venerable USAF English Comprehension Level (ECL) test prior to participating in Red Flag. To assist with the English improvement, the FAC secured twelve slots in the 4-month “Specialized Aviation English” course at the USAF Defense Language Institute - English Language Center (DLI) at Lackland AFB, Texas. Twelve pilots were sent, two at time, beginning in November 2009. To accelerate the learning, civilian English Instructors from DLI and from the AFMIS deployed to Palanquero to work full-time with CACOM-1 pilots. There was no doubt that CACOM-1 pilots, along with air traffic controllers, were serious about reaching the English goal. General Bueno directed an “English only” policy for his Red Flag team for the final year before the deployment. Beginning in May 2011, all flight briefings, debriefings,

and communications for the Red Flag team were accomplished completely in English.

The flying training was even more rigorous. Each Kfir pilot completed a six-phase flying training program. Three USAF fighter pilots, each an instructor and specialist in tactical fighter training, deployed sequentially to Palanquero to help the pilots with the training course. Lt Col Patrick "Ichi" Karg deployed to CACOM-1 from May to September 2011. Lt Col James "Red" Barron from 12AF deployed from October 2011 to March 2012. Finally, Major James "Crashin" Byrne deployed from April to July 2012. Crashin also accompanied the Red Flag team to Nellis AFB. All three instructor pilots taught classes and flew in the rear cockpit of the Kfirs. They were instrumental in helping CACOM-1 pilots learn to successfully employ their new radar and missile systems in the air-air and air-ground roles they would perform in Red Flag. In addition to the three pilots, USAF maintenance and logistics specialists visited Palanquero to verse CACOM-1 technicians in Red Flag flight line procedures.

CACOM-1 pilots were very experienced in the air-ground mission. However, they were new to the air-air mission. Use of USAF terminology and radar intercept procedures was a real challenge. With hundreds of phrases and procedures to master in a short time, the pilots, as well as their instructors, frequently felt frustrated. Major Ichi Karg persevered. FAC Major Hedin "Tornado" Vargas describes their frustration and their success:

*"We began to fly with the USAF communications contract. For us this was crazy. We felt dejected, lost. When we arrived at home each night we spent hours studying and reviewing. It never occurred to us that there could be so much information in this type of training. Nevertheless, Ichi persisted. So, the first time there was a positive lock on a mission, we were able to lock the radar and comply with the 'timeline', Ichi said to us: 'I can't believe it!' Two tears appeared in eyes."*

A critical aspect of fourth generation Red Flag scenarios is the necessity for pilots to work as a team with air intercept controllers (GCI). Because the airspace in northern Colombia lends itself to easier coordination with GCI, in January 2012 CACOM-1 pilots and controllers deployed to the CACOM-3 base in Barranquilla and spent the last six months prior to Red Flag training there. In the adjacent airspace over the Caribbean, with the help of AFMIS personnel who know the Red Flag airspace, they set up what they called "Nellis North" airspace, complete with GCI, to simulate Red Flag airspace.

Another very demanding aspect of Red Flag is the ground, departure, and arrival procedures. Nellis AFB is very crowded and pilots participating in Red Flag usually have an urgent need to land because of low fuel. It is imperative that all pilots comply with strict procedures for navigating to and from the Red Flag area located a few minutes flying time north of the base. Taking advantage of the latest in information technology, cadets at the FAC's flight simulation lab at the Air Force Academy in Cali developed flight and taxi simulations for Nellis AFB and the Red Flag airspace. Red Flag Kfir and tanker pilots spent several days in the simulators practicing Nellis ground, departure, and arrival procedures; communicating with simulated air traffic controllers in English. Thanks to the technologically advanced cadets at the Academy, the Red Flag team was well prepared for all Nellis flying procedures and committed no deviations during Red Flag 12-4.

FAC tanker crews had long experience refueling FAC fighter and transport aircraft over Colombia during years of real-world operations. However, to conduct refueling in Red Flag, a requirement on every mission, the tanker crews would be required to comply with the NATO standard for air refueling. This standard is contained in NATO manual ATP-56, a 500+ page behemoth written in technical English. The FAC would send both its tankers to Red Flag 12-4: the venerable KC-137 "Zeus" which had served for many years in countless operations, and the newly acquired KC-767 "Jupiter" which would transport the majority of CACOM-1's equipment from Colombia to Nellis. Despite the Manual's difficult technical English and the accompanying culture shock in adapting to the NATO way of doing a job in which they were already experts, the six pilots studied many long hours and successfully assimilated ATP-56. Their hard work was rewarded when, along with the Kfir pilots, they successfully passed their USAF certification the first week of November 2011.

Finally, to demonstrate their readiness for the deployment, the pilots of Jupiter and Zeus led the entire group on a practice deployment in March 2012. In the so called, "fighter drag" the tankers air refueled the eight Kfirs multiple times on circuitous 6-hour flight from Palanquero north over the Caribbean, south over Panama and back to Cali, where they unpacked their equipment and set up shop as if they had arrived at Nellis AFB. Along with passing the November 2011 Red Flag certification, the "fighter drag" gave all participants a necessary boost of confidence.

The preparation program was difficult enough on its own without complications from Mother Nature. CACOM-1 personnel had to deal with a major natural disaster in the midst of their Red Flag preparation. The

Magdalena River has a long history of seasonal flooding. The base in Palanquero is built just a few meters above the normal level of the river. In November 2008 torrential rains in Colombia caused the river to flood the base. CACOM-1's system of dykes and levees was breached. After recovering, CACOM-1 reinforced its flood protection system with deeper dykes and higher levees. However, in April 2011, with its personal earnestly involved in the Red Flag program, the worst Magdalena flooding in Colombia's history struck Palanquero. All was lost in base housing. The runway was covered, the majority of the operations area was flooded, and the base was unusable for weeks. In the midst of preparing to participate in the fulfillment of their dream, several pilots lost all their worldly possessions. Fortunately, no one was injured. Despite the blow from Mother Nature, CACOM-1 personnel were undeterred. When the water receded, Red Flag training recommenced in earnest.

Another challenge faced by CACOM-1 was a shortage of personnel. The FAC, like most Air Forces, does not have all the personnel required to meet the demands placed upon it. The typical FAC pilot shoulders several additional non-flying duties. Despite its under-manning, General Bueno directed his Red Flag team to dedicate themselves exclusively to Red Flag preparation. This required logistics and administrative officers and NCOs to shoulder the extra burdens formerly tasked to the Red Flag pilots. The selection of the CACOM-1 Red Flag team had effectively divided the unit into two groups: those going to Red Flag and those not going. This division created a certain amount of resentment within the group, especially since the burden of day to day CACOM-1 operations had to be borne by a significantly smaller group of officers and NCOs: those not going to Red Flag. To make matters worse, many of the most experienced pilots were not chosen because of their lower level of English. General Bueno overcome this resentment in the ranks by emphasizing that Red Flag represented a commitment by all CACOM-1 personnel, those going and those not going. The reputation of CACOM-1 was on the line and all must work together to ensure the success of the unit and the success of the Colombian Air Force.

In November 2011 when they passed the certification, General Bueno declared a base-wide party back at Palanquero. Extremely proud of his people for their tremendous effort, he set several objectives for the upcoming deployment to Red Flag. It would not be a question of 'winning' Red Flag. Rather, the deployment would be about learning interoperability and new tactics and demonstrating the professionalism of the FAC. He emphasized to

his aircrews that, despite their eagerness to demonstrate their proficiency with the new fourth generation weapons systems they had just mastered, they would be professional in their employment. They would demonstrate good judgment at all times; on the ground and in the air. They would operate their aircraft always in a safe manner. There were to be no 'fratricide', nor 'training rules' violations. He had every reason to have confidence in his pilots.

## **The Red Flag Experience**

The flotilla of two tankers, eight Kfirs, and 107 personnel departed Palanquero 29 June 2012. On 2 July 2012 it arrived at Davis-Monthan AFB in Tucson, Arizona. The group remained six days in Tucson where the pilots received final indoctrination in Red Flag procedures. On Friday, 13 July the group arrived at Nellis AFB. They unloaded their equipment from Zeus and Jupiter, parked the Kfirs on the Red Flag ramp, and settled into their operations and logistics spaces.

Major Oscar "Zero" Sanchez was selected as the flight leader for this first ever FAC mission in Red Flag, bearing CACOM-1's Red Flag callsign: "Rocket 41". Normally, the Red Flag weather is clear with unlimited visibility. With so many aircraft involved, bad weather creates confusion and requires flight leaders to exercise good judgment. This first day of Red Flag 12-4 was one of those bad weather days. Fortunately, "Zero" was leading Rocket 41. His was to be the first Blue Force flight across the target. Despite having a detailed plan, things began to change for Rocket 41 before takeoff. The tanker, Jupiter, cancelled due to an engine problem. The Blue Force Commander announced a 'rolex', a several minute delay. Zero made a quick fuel calculation, then, took his flight into the air confident in his ability to make the Commander's plan work despite the changes. When he arrived in the exercise airspace he found weather worse than the conditions that had been briefed. Then he learned via radio that the controlling AWACS had returned to base. Realizing he faced a shortage of fuel, poor weather, and no AWACS, Zero remembered the direction of General Bueno to always demonstrate good judgment. He promptly made a command decision: he returned his flight to base where they all landed safely. Those Blue Force pilots who had continued to the area were forced to abort their missions a few minutes later. Zero's decision to return early impressed the Red Flag staff. They realized Zero had demonstrated a maturity not normally seen among pilots flying for the first time in Red Flag.

Major Hedin "Tornado" Vargas was chosen to lead Rocket 41 the next afternoon. Tornado, Commander of one of the CACOM-1 fighter squadrons,

had been one of the original cadre of pilots to qualify in the new Kfir C-10. Due to his experience in the aircraft and his proficiency in English, Tornado was an easy choice for the Red Flag team. He was the first pilot sent to DLI for the 'Aviation English Course'. He graduated with top marks and upon returning to Palanquero worked to help his fellow pilots improve their English. He had been selected to attend the FAC's year-long Air Command and Staff College in 2010. Completion of the course is a requirement for promotion to Lieutenant Colonel. Despite the threat of losing his chance for promotion, Tornado declined the Staff College course in favor of remaining with this Red Flag team members. It was an excellent decision.

The day before the mission, Tornado led Rocket 41 flight through the standard Red Flag mission planning: the target study, the meetings with the mission commander, and the pre-briefing. On mission day the mass briefing began three hours before the first takeoff. It was attended by 300+ personnel in the famous Red Flag Main Auditorium. Present were aircrews, controllers, safety monitors, threat and tracking system operators, and ever vigilant the Red Flag staff. The walls were covered with the plaques of hundreds of flying squadrons from the US and allies, participants in past Red Flags. During the mass brief the mission commander reviewed the tactical plan. More than 60 Blue Force aircraft would push from the east, attack dozens of targets in the west, and return to their safe area in the east. The plan depended on the synchronization of all Blue Force elements: tankers, offensive counter-air, SEAD, escort, and strikers. Rocket 41 flight was going deep, into the far western end of red territory. They would be the first strikers to push and would target enemy tanks behind the line of battle with 500-lb general purpose bombs. The tanks were camouflaged against the desert. They would not be easy to find. Rocket 41 flight left the mass briefing understanding the plan and confident of their ability to carry out their part.

The engine start and taxi went as planned. Tornado paid strict attention to the taxi flow plan to ensure he inserted Rocket 41 in the correct order. If a flight taxies out of order, the confusion caused can affect the entire plan. It was critical to be precise in everything. The English used by the other aircrews on the radio, with accents from around the world, was difficult for Tornado. He strained to understand and maintain his situational awareness.

Rocket 41 flight taxied on time and in the correct order. They made it through the final check at the end of the runway where their bombs were armed and they were cleared to take the runway. Rocket 41 lined up in echelon formation on the runway, ready for takeoff. Cleared for takeoff, the pilots

departed individually with 30 second spacing between aircraft. Afterburners roared as the Kfirs, loaded down with bombs and fuel, leapt into the hot desert air. Tornado led his flight to the orbit point, put his flight in holding formation, and awaited push time.

A sudden communications failure on the blue AWACS resulted in all Blue Force operating on the same frequency. There was so much radio chatter Tornado couldn't follow it all, despite having mastered all the required USAF terminology during his years of Red Flag preparation. He kept his cool and pushed his flight on time, heading west across 100nm of desert, mountains, SAMs, AAA, and Aggressors that separated his flight from their target.

Halfway to the target Tornado locked a bogey on his radar: 12 o'clock for 15nm, most likely an Aggressor. Unable to obtain a positive identification, he resisted the temptation to engage, remembering General Bueno's directive to avoid fratricide. Sixty seconds later an Aggressor zoomed below his flight in the opposite direction. No time to worry about it now. They were closing on the target.

After 15 stressful minutes on ingress, that seemed to him like an eternity, Tornado rolled in on his target from 15,000 feet. For five long seconds he searched for the line of enemy tanks in the desert whose photos he had spent over an hour studying the day before. As soon as he found them he would superimpose his CCIP "death dot" over the center tank. However, the tanks were invisible, masked against the desert. Just as his five seconds expired, with his Kfir in a steep dive, Tornado finally spotted them. Too late! He went through dry rather than risk an overbank and a dangerous situation. As he recovered his aircraft, he marked the target over the radio for his flight members behind him. Without thinking about it at the time, he had again complied with his commander's most important directive, demonstrating the maturity of a seasoned tactical aviator. In going through dry he had avoided a classic dangerous situation that has ensnared many fighter pilots. Less experienced pilots in the same situation have forced their aircraft into a dangerous attitude in order to drop and many have paid with their lives.

Off target Rocket 41 flight immediately encountered a 'furball' 12 o'clock at 10nm; a collection of enemy and friendly fighters engaged in a dogfight. With the radio totally saturated, Tornado was again unable to obtain an identification and, although very tempted, did not shoot, once again avoiding fratricide. Instead of remaining to fight, Tornado led his flight at top speed around the furball and headed for home. A less experienced flight leader may



have engaged, most likely resulting in the loss of one or more his flight members.

Tornado led Rocket 41 back to Nellis where the pilots pitched out over the runway and landed. Following such an intense mission in which it seemed he had strained every muscle and brain cell to maintain situational awareness and lead his flight into and back from the target safely, Tornado relaxed in the cockpit as his aircraft rolled out on the runway. He felt tremendous satisfaction in the realization that he had just successfully and safely accomplished what he had hoped for during the last two and half years. He had complied with all procedures, understood the radio calls, and avoided fratricide! A tear welled up in his eyes as he exited the runway. He had realized his dream!

### **How Did the CACOM-1 Pilots Do?**

During the first two days of the exercise four pilots led missions: Yahdai, Zero, Tornado, and Major William “Falcon” Bello, another Palanquero squadron commander. They demonstrated professionalism, good judgment, and tactical expertise. The trend they set continued for the rest of the two week exercise. As General Bueno had directed, there were no incidents of Training Rule violations. There was 100% compliance with Red Flag procedures, on the ground as well as in the air. Such a performance is very rare among USAF squadrons with experience in Red Flag and is unheard of among units participating for their first time in Red Flag. The professionalism and maturity of CACOM-1 pilots impressed the Red Flag staff. USAF Colonel Tod Fingal, Commander of the 414<sup>th</sup> Training Squadron and Director of Red Flag said of CACOM-1:

*"The Colombian Air Force's participation in Red Flag 12-4 was a huge success. Their nearly three years of training and preparation for this Large Force Exercise truly paid off. The Colombians smoothly navigated their way through high-stress, realistic combat training to achieve interoperability with more than 1,800 other participants from three different countries. They are valued partners and friends."*

In addition to professionalism, CACOM-1 pilots and technicians displayed proficiency and effectiveness in operations and logistics. With dedicated support from the 70 maintenance and support technicians the unit flew a total of 63 Kfir sorties with only 3 aborted missions, and 15 tanker sorties with only 2 aborts during the exercise. Jupiter and Zeus together delivered a total of 89,000 lbs of fuel to the Kfirs, completing a total of 180 air

refuelings. Of the targets tasked to Rocket 41 flight during the exercise, 80% were destroyed. The Kfir pilots amassed nine air-air kills, an achievement that nobody would have expected before the exercise. During the two weeks 9 Kfirs were simulated lost to the red SAMs and AAA, while 4 Kfirs were lost to the Aggressors. All of this resulted in a tremendous amount of tactical learning by the pilots, one of CACOM-1's primary objectives. USAF Major James "Crashin" Byrne, who accompanied CACOM-1 to Red Flag was so pleased with their performance he exclaimed: *"I am more proud of you guys than I was when my own son took his first steps!"*

Red Flag 12-4 gave a huge boost of confidence to the CACOM-1 pilots. They had deployed to Nellis and faced the challenge of participating in the world's premier air power exercise. Another important gain was made in the field of interoperability. AFMIS Chief USAF Colonel Palaoro stated, as quoted in Dialogo Magazine (27 July 2012):

*"During their preparation for Red Flag they (FAC aircrews) learned and adopted the NATO international standard for Aerial Refueling, making tanker interoperability with us a reality. They adopted USAF flight line standards and air-to-air training rules, and they have truly demonstrated their capacity to operate safely and very effectively with us – fully integrated - in the world's toughest large force employment exercise. I could not be more proud of what they've done, and this represents the beginning of a new phase in our already strong relationship."*

Now to address the question of how CACOM-1 made the "leap" from operating at the second generation level to participation in Red Flag at fourth generation level. How is it possible that they were able to make such tremendous progress in their tactical capabilities in just over two years? Their success can be attributed to five factors.

1. CACOM-1 has the best FAC pilots. Before assignment to CACOM-1 they have achieved excellence in other aircraft. The same situation applies to the tanker pilots. The best of the transport pilots are assigned to fly Jupiter and Zeus.
2. Experience in combat. Like all FAC pilots, CACOM-1's pilots are veterans of numerous combat operations. Many have led packages of fighters in strike missions against guerrillas in Colombia. While the guerillas do not represent the same threat simulated in Red Flag, any pilot will confirm that there is nothing like real combat operations to quickly make an inexperienced pilot into an

experienced pilot. Combat forces pilots to exercise sound judgment in the air. Moreover, combat operations in Colombia require very strict rules of engagement to avoid collateral damage as the insurgents are generally mixed with the civilian population. This fact made adhering to Red Flag rules of engagement less of a challenge for CACOM-1 pilots. The experience, professionalism, and judgment CACOM-1 pilots had gained in combat were evident for all to see in Red Flag 12-4. In addition, General Pinilla listed four specific areas in which combat operations had helped prepare his pilots.

- a. Technology. Combat operations have necessitated the acquisition and employment of increasingly high technology weapons systems by the FAC, such as: night vision goggles, computed air-ground delivery systems, and precision guided bombs.
  - b. Training. Combat operations compel FAC pilots to take their various training courses very seriously. They each know that upon graduation from training they can be thrust directly into combat where their lives are on line.
  - c. Fusion of operations with intelligence. Combat operations have taught FAC aircrews the value of intelligence.
  - d. Jointness. Combat has taught all Colombian military services (Army, Navy, Air Force, National Police) the value of operating in a joint manner, mutually supporting each other.
3. Focus on training. CACOM-1 pilots trained intensively for over two years to realize their dream of participating in Red Flag. They built an excellent training plan and stuck to it. Their leaders, from the Air Force level to the squadron level, continually motivated all to continue. They tackled the required English and flying training with an unquestioned persistence. An enormous amount of credit must be given as well to the personnel, flyers and non-flyers, who were not chosen to participate in Red Flag. They are the unsung heroes who shouldered an extra burden so their compatriots could realize the dream of Red Flag. Hopefully, each of them will have the opportunity to participate in a future Red Flag.

4. Cooperation with the USAF. Colonel Palaoro and his AFMIS staff, along with officers from 12AF, provided an invaluable service. They advocated for USAF resources and coordinated deployment of USAF personnel to Palanquero. Moreover, very special thanks are due to the three dedicated USAF instructor pilots. Without the daily expertise, both in the briefing room and in the rear cockpit, of Lt Col “Ichi” Karg, Lt Col “Red” Barron, and Major “Crashin” Byrne, the dream would not have been realized.
5. The technicians. Great credit must be given to the maintainers and technicians, who prepared, launched, loaded, and kept the aircraft flying, allowing the pilots to employ the aircraft. CACOM-1 technicians’ skill at fixing aircraft was on display, as was their ability to operate in adverse conditions and integrate with USAF technicians. The ramp temperature during the afternoon launches sometimes reached 50C. The success of the pilots was founded on the hard work and sacrifice of the maintenance and logistics technicians. General Bueno described their work:

*“The other very important part is the technicians. Our technicians have worked very hard. I explained to them what was happening and what the scenario was about, how it could be applied to the real world and that we were testing whether we could be interoperable with a coalition. And that the other air forces are watching us to see what a Colombian is made of, if he has the capacity to change a fuel tank in the 50 C degree sun. All of them gave it their all and I couldn’t be more proud. They treated the deployment as if it were a war, not a vacation or an exercise. We know it isn’t easy to have this opportunity. We don’t know when we will be able to return, so everyone wants to do their best. I said to the technicians: ‘You are not launching and recovering aircraft. You are participating in a war, something that one prepares for all his life.’”*

## **The Value of Red Flag 12-4 – The Future**

Via CACOM-1 the FAC realized the dream of participating in Red Flag. Nevertheless, for the FAC and CACOM-1 Red Flag will be more than just a dream, it will be transformational. It will result in a new, amplified vision for the FAC. Major William “Falcon” Bello echoed the sentiments of his colleagues

as he summed up the transformational importance of Red Flag 12-4 for the FAC:

*“Red Flag 12-4 is a way to send a message that Colombia has a professional air force, an air force that was initially built in its internal conflict and that, thanks to this interaction with the USAF, we have achieved a maturity that allows us to integrate with a coalition. The lesson learned for all of us here is of transforming our air force because Red Flag is really a transformation point. Like the rest, I feel proud and committed that in the near future not only the Kfir squadron will be at this level, but that the entire Air Force in all its missions: transport, combat, CSAR will reach these standards of integration and synchronization.”*

General Bueno summed up the essence of what the FAC gained from Red Flag.

*“Red Flag isn’t a championship, it’s not win or lose, but it’s about learning, learning as much as possible: to fly safely, to have our pilots discover the immense world of possibilities that belong to combat aviation which is an art, and a science that requires much dedication and we can take only a small amount of it away with us. It’s about being outstanding. Outstanding in what? It’s about being outstanding in that we were safe, and we were professional, and we were respectful, and that our air force, with the Kfir squadron and the tanker squadron, tried to reach the level of the world’s best air forces, to guarantee interoperability in the future, and have allied air forces be proud to work with us.”*

Referring to his pilots and their future role as FAC leaders General Bueno added:

*“These pilots are the future leaders of the Colombian Air Force. As a result of their participation in Red Flag they will have a global vision, not just a regional vision.”*

And speaking of vision, General Pinilla, as COFAC, has a vision for what his air force can become. His three goals for the FAC:

1. *“Be capable of winning our internal war.”*
2. *“Be one of the most operational air forces in Latin America.”*
3. *“Be interoperable with our friends.”*

General Pinilla believes this first participation in Red Flag with contribute significantly to these goals. He is justifiably proud of what his people have done. He emphasizes the accomplishment of his tanker force:

*“I can tell you that today the FAC is interoperable in tankers. Because of our preparation for Red Flag we now have certification in the NATO air refueling regulation ATP-56, the requirement to operate in the tanker ‘big leagues’.”*

Gen Pinilla is certain that Red Flag 12-4 is merely the starting point for the FAC’s continued collaboration with regional allied air forces. He intends for the FAC to participate in other regional air power force employment exercises: “Salitre” in Chile, “CruzEx” in Brazil, “Maple Flag” in Canada, and “Green Flag” in the US. And, he plans for the FAC to return to Red Flag in the very near future.

On 30 July 2012, thanks to several aerial refuelings from Jupiter and Zeus, the first Kfirs arrived back at Palanquero with General Bueno leading the formation. The General had successfully led CACOM-1 on the FAC’s first overseas operational deployment. Before landing the Kfirs made several triumphal passes over the assembled audience below. On the ground the pilots were received as returning heroes by military and government leaders. Then, they took time to enjoy their significant feat with family and friends. They comprehended that by participating in Red Flag 12-4 they had not only realized the dream of every Colombian air force pilot, but also had taken a giant step forward toward realizing General Pinilla’s vision.



**Coronel Kris Skinner** (USAF-Ret.) retired on June 1, 2012, after thirty years of active service with the US Air Force. He received his commission in the USAF in 1981 and was an F-16 pilot for over twenty years. He graduated from the Venezuelan Air Force (FAV) Air War College in 1996 and in 1998 served as an F-16 exchange pilot with the FAV. He was commander of the 56th Operations Support Squadron at Luke AFB in Arizona from 1998-2000 and commander of the 98th Operations Group at Nellis Air Force Base in Nevada from 2003-2005. Colonel Skinner was Head of Air Mission of the USAF (Musaf) in Bogotá, Colombia from 2001 to 2003 and Director of the element Air Component Coordination USAF (ACCE) in Bogotá, Colombia from 2005-2010. In his last assignment he served as Secretary General of the System of Cooperation among the American Air Forces (SICOFAA) from January 2010 to April 2012.